

# Compounds from Table A

Ceperley 10/025,378

November 12, 2003

=> d que

L4	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	"UREA, N-(3-(DIMETHYLAMINO)PR OPYL)-N'-ETHYL-"/CN
L9	115	SEA FILE=REGISTRY ABB=ON	PLU=ON	C5H14N2/MF
L10	115	SEA FILE=REGISTRY ABB=ON	PLU=ON	L9 AND NC=1
L11	108	SEA FILE=REGISTRY ABB=ON	PLU=ON	L10 NOT IDS/CI
L12	108	SEA FILE=REGISTRY ABB=ON	PLU=ON	L11 NOT PMS/CI
L13	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	L12 AND "DIMETHYLAMINOPROPYLA MINE"
L16	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	"1,3-PROPANEDIAMINE, N,N-DIETHYL-"/CN
L19	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	1-PROPANAMINE, 3-CHLORO-N,N-D IMETHYL-/CN
L20	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	TRIETHYLAMINE/CN
L21	1	SEA FILE=REGISTRY ABB=ON	PLU=ON	TRIETHANOLAMINE/CN
L22	6	SEA FILE=REGISTRY ABB=ON	PLU=ON	L4 OR L13 OR L16 OR (L19 OR L20 OR L21)
L24	1318	SEA FILE=HCAPLUS ABB=ON	PLU=ON	"IMMUNOASSAY (L) AGGLUTINATION TEST"+OLD/CT
L25	47253	SEA FILE=HCAPLUS ABB=ON	PLU=ON	IMMUNOASSAY+OLD,NT/CT
L27	10963	SEA FILE=HCAPLUS ABB=ON	PLU=ON	CARBODIIMIDES+NT/CT
L28	44	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L22 AND L25
<del>L30</del>	<del>9</del>	<del>SEA FILE=HCAPLUS ABB=ON</del>	<del>PLU=ON</del>	<del>L28 AND (L24 OR L27 OR CDI OR CARBODIIMID? OR (PARTICL? OR LATEX) (3A) (AGGLUT? OR FIX?))</del>

=> ~~d libb abs hitind hitstr l30 1-9~~

L30 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2003:488678 HCAPLUS  
 DOCUMENT NUMBER: 139:49497  
 TITLE: Tertiary amine compounds for use in immunoassays  
 INVENTOR(S): Lawrence, Christopher C.; Shanafelt, Armen B.  
 PATENT ASSIGNEE(S): Roche Diagnostics GmbH, Germany; F. Hoffmann-La Roche  
 AG  
 SOURCE: Eur. Pat. Appl., 13 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1321770	A2	20030625	EP 2002-27992	20021214
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
US 2003138974	A1	20030724	US 2001-25378	20011218
JP 2003207512	A2	20030725	JP 2002-363686	20021216
PRIORITY APPLN. INFO.:			US 2001-25378	A 20011218
OTHER SOURCE(S): MARPAT 139:49497				
AB A reagent for use in immunoassays reduces interference in <b>particle agglutination</b> assays. The reagent contains particles having covalently bound antibodies and a tertiary amine compd. of formula (I): N(R1-X)(R2-Y)(R3-Z). The moieties R1, R2, and R3 are independently alkyl or alkyl ether. The moieties X, Y, and Z are independently -OH, -O-R4,				

-S-R4, -C(=O)-OH, -C(=O)-OR4, or -C(=O)-NHR4 and R4 is alkyl.  
Triethanolamine gave improved performance in **latex**

**agglutination** immunoassays.

IC ICM G01N033-53

ICS G01N033-543

CC 9-10 (Biochemical Methods)

ST tertiary amine reducing interference **particle**  
**agglutination** immunoassay; **latex agglutination**  
immunoassay triethanolamine reducing nonspecific binding

IT **Immunoassay**

(**agglutination test**; tertiary amine compds. for  
reducing interference in **particle agglutination**  
immunoassays)

IT Antibodies

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(immobilized; tertiary amine compds. for reducing interference in  
**particle agglutination** immunoassays)

IT **Immunoassay**

(**latex agglutination test**; tertiary amine  
compds. for reducing interference in **particle**  
**agglutination** immunoassays)

IT Antibodies

RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study);  
RACT (Reactant or reagent); USES (Uses)  
(monoclonal, latex particles sensitized with; tertiary amine compds.  
for reducing interference in **particle agglutination**  
immunoassays)

IT **Carbodiimides**

RL: RCT (Reactant); RACT (Reactant or reagent)  
(particle surface activation with; tertiary amine compds. for reducing  
interference in **particle agglutination**  
immunoassays)

IT **Latex**

(particles; tertiary amine compds. for reducing interference in  
**particle agglutination** immunoassays)

IT Amines, preparation

RL: SPN (Synthetic preparation); PREP (Preparation)  
(reaction products, with succinimide esters, on particle surface;  
tertiary amine compds. for reducing interference in **particle**  
**agglutination** immunoassays)

IT Blood analysis

Immobilization, molecular

**Immunoassay**

Microparticles

Test kits

(tertiary amine compds. for reducing interference in **particle**  
**agglutination** immunoassays)

IT Amines, analysis

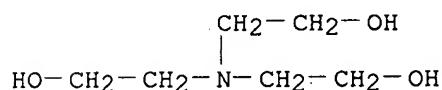
RL: ARU (Analytical role, unclassified); ANST (Analytical study)  
(tertiary; tertiary amine compds. for reducing interference in  
**particle agglutination** immunoassays)

IT **Particles**

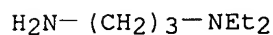
(with immobilized antibodies; tertiary amine compds. for reducing  
interference in **particle agglutination**  
immunoassays)

IT 459-73-4DP, Glycine ethyl ester, reaction products with succinimide ester  
929-06-6DP, reaction products with succinimide ester 929-59-9DP,

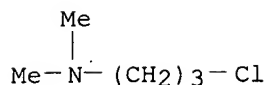
- 2,2'-(Ethylenedioxy)bisethylamine, reaction products with succinimide ester 4246-51-9DP, 4,7,10-Trioxa-1,13-tridecanediamine, reaction products with succinimide ester  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (on particle surface; tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
- IT 1403-66-3, Gentamicin  
 RL: ANT (Analyte); ANST (Analytical study)  
 (tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
- IT 102-71-6, Triethanolamine, analysis 104-78-9,  
 3-Diethylaminopropylamine 109-54-6, Dimethylaminopropylchloride 109-55-7, 3-Dimethylaminopropylamine 121-44-8,  
 Triethylamine, analysis 32897-26-0, 1-Ethyl-3-(3-dimethylaminopropyl)urea  
 RL: ARU (Analytical role, unclassified); ANST (Analytical study)  
 (tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
- IT 633-96-5 929-06-6 1892-57-5, 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide 6066-82-6, N-Hydroxysuccinimide  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
- IT 123-56-8DP, Succinimide, esters, reaction products with primary amine on particle surface  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
- IT 102-71-6, Triethanolamine, analysis 104-78-9,  
 3-Diethylaminopropylamine 109-54-6, Dimethylaminopropylchloride 109-55-7, 3-Dimethylaminopropylamine 121-44-8,  
 Triethylamine, analysis 32897-26-0, 1-Ethyl-3-(3-dimethylaminopropyl)urea  
 RL: ARU (Analytical role, unclassified); ANST (Analytical study)  
 (tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
- RN 102-71-6 HCAPLUS  
 CN Ethanol, 2,2',2''-nitritotris- (9CI) (CA INDEX NAME)



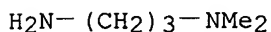
- RN 104-78-9 HCAPLUS  
 CN 1,3-Propanediamine, N,N-diethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



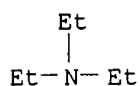
- RN 109-54-6 HCAPLUS  
 CN 1-Propanamine, 3-chloro-N,N-dimethyl- (9CI) (CA INDEX NAME)



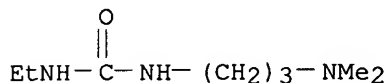
RN 109-55-7 HCAPLUS  
 CN 1,3-Propanediamine, N,N-dimethyl- (6CI, 8CI, 9CI) (CA INDEX NAME)



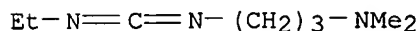
RN 121-44-8 HCAPLUS  
 CN Ethanamine, N,N-diethyl- (9CI) (CA INDEX NAME)



RN 32897-26-0 HCAPLUS  
 CN Urea, N-[3-(dimethylamino)propyl]-N'-ethyl- (9CI) (CA INDEX NAME)



IT 1892-57-5, 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)  
 RN 1892-57-5 HCAPLUS  
 CN 1,3-Propanediamine, N'-(ethylcarbonimidoyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



L30 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2003:355758 HCAPLUS  
 DOCUMENT NUMBER: 138:350816  
 TITLE: Particles for immunoassays and methods for treating the same  
 INVENTOR(S): Lawrence, Christopher C.; Yuan, Wei; Shanafelt, Armen B.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 14 pp., Cont.-in-part of U.S. Ser. No. 53,058.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003087458	A1	20030508	US 2001-25196	20011218
US 2003092201	A1	20030515	US 2001-53058	20011102
EP 1319953	A1	20030618	EP 2002-24080	20021029

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

JP 2003185667	A2	20030703	JP 2002-318893	20021031
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PRIORITY APPLN. INFO.: US 2001-53058 A2 20011102  
US 2001-25196 A 20011218

OTHER SOURCE(S): MARPAT 138:350816

AB A method of treating particles to be used in immunoassays reduces interference in **particle agglutination** assays. For particles having covalently bound antibodies and residual NHS-ester or sNHS-ester groups on the surface, the reactive esters are treated with an aq. mixt. contg. an amine compd. of formula (I): 2 The moiety -X is -NH<sub>2</sub>, -OH, or -CO<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>; and R is an alkyl group or an alkyl ether group. When -X is -NH<sub>2</sub> or -CO<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>, R contains from 1 to 20 carbon atoms; and when -X is -OH, R contains from 4 to 20 carbon atoms.

IC ICM G01N033-543  
ICS G01N033-545; B05D003-00

NCL 436523000; 427002110

CC 9-10 (Biochemical Methods)

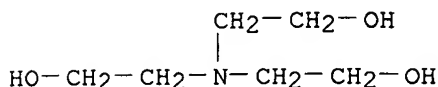
IT **Immunoassay**  
(**agglutination test, Particle;**  
**particles** for immunoassays and methods for treating the same)

IT Adsorption  
Alkyl groups  
Amino group  
Blood serum  
Ceramics  
Chemical formula  
Coupling agents  
Hydroxyl group  
**Immunoassay**  
Interference  
Latex  
Mixtures  
Particles  
Surface  
Test kits  
pH  
(particles for immunoassays and methods for treating the same)

IT **Carbodiimides**  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(particles for immunoassays and methods for treating the same)

IT 79-09-4D, Propanoic acid, amines contg. **102-71-6**,  
Triethanolamine, reactions 123-56-8D, Succinimide, esters 459-73-4,  
Glycine ethyl ester 929-06-6 929-59-9, 2,2'-  
(Ethylenedioxy)bisethylamine 4246-51-9, 4,7,10-Trioxa-1,13-  
tridecanediamine 6066-82-6, N-Hydroxysuccinimide 7440-44-0D, Carbon,  
amines contg. 7782-44-7D, Oxygen, compd. contg. 82436-78-0,  
N-Hydroxysulfosuccinimide  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(particles for immunoassays and methods for treating the same)

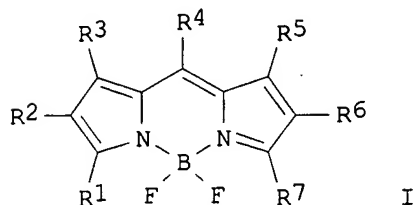
IT 102-71-6, Triethanolamine, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (particles for immunoassays and methods for treating the same)  
 RN 102-71-6 HCAPLUS  
 CN Ethanol, 2,2',2''-nitrilotris- (9CI) (CA INDEX NAME)



L30 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2003:42536 HCAPLUS  
 DOCUMENT NUMBER: 138:103273  
 TITLE: Two-photon absorbing dipyrromethene boron difluoride  
 dyes and their applications  
 INVENTOR(S): Meltola, Niko; Soini, Aleksi  
 PATENT ASSIGNEE(S): Arctic Diagnostics Oy, Finland  
 SOURCE: PCT Int. Appl., 65 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003005030	A1	20030116	WO 2002-FI586	20020701
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MY, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: FI 2001-1439 A 20010702  
 US 2001-301788P P 20010702  
 OTHER SOURCE(S): MARPAT 138:103273  
 GI



AB The invention relates to a sepn. free bioanal. assay method for measuring an analyte from a biol. fluid or suspension comprising of microparticles as a bioaffinity binding solid phase, a biospecific secondary reagent labeled with a two-photon fluorescent dipyrrometheneboron difluoride dye, focusing the laser into the reaction suspension measuring two-photon excited fluorescence from single microparticles when they randomly float or are guided by the radiation pressure of the excitation laser through the focal vol. of the laser beam using a two-photon fluorescent dipyrrometheneboron difluoride dye. Dye has the structure II. At least one of the groups R1, R2, R3, R4, R5, R6 or R7 is substituted to yield a chem. reactive group that can be used for selective covalent linkage to other mols. and at least one of the groups R1, R2, R3, R4, R5, R6, R7 is substituted to yield a water-solubilizing group.

IC ICM G01N033-543  
ICS C09B062-44

CC 9-5 (Biochemical Methods)  
Section cross-reference(s): 41

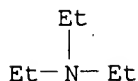
IT Body fluid  
Drugs  
Fluorometry  
**Immunoassay**  
Laser radiation  
Microparticles  
Two-photon absorption  
(two-photon absorbing dipyrromethene boron difluoride dyes and their applications)

IT 68-12-2, DMF, reactions 121-44-8, Triethylamine, reactions 538-75-0, N, N'-Dicyclohexylcarbodiimide 2386-37-0 54474-50-9 72078-45-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(two-photon absorbing dipyrromethene boron difluoride dyes and their applications)

IT 121-44-8, Triethylamine, reactions 538-75-0, N, N'-Dicyclohexylcarbodiimide  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(two-photon absorbing dipyrromethene boron difluoride dyes and their applications)

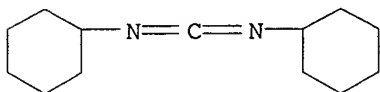
RN 121-44-8 HCAPLUS

CN Ethanamine, N,N-diethyl- (9CI) (CA INDEX NAME)



RN 538-75-0 HCAPLUS

CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:365353 HCAPLUS

DOCUMENT NUMBER: 137:58925

TITLE: New approach to immunochemical determinations for triclopyr and 3,5,6-trichloro-2-pyridinol by using a bifunctional hapten, and evaluation of polyclonal antiserum

AUTHOR(S): Watanabe, Eiki; Hoshino, Ryoko; Kanzaki, Yukiko; Tokumoto, Hiroshi; Kubo, Hiroaki; Nakazawa, Hiroyuki

CORPORATE SOURCE: Department of Analytical Chemistry Faculty of Pharmaceutical Sciences, Hoshi University, Shinagawa-ku Tokyo, 142-8501, Japan

SOURCE: Journal of Agricultural and Food Chemistry (2002), 50(13), 3637-3646

CODEN: JAFCAU; ISSN: 0021-8561

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:58925

AB The present work describes the design and synthesis of the structurally unique hapten, "bifunctional hapten", to produce a group-specific polyclonal antiserum to triclopyr and 3,5,6-trichloro-2-pyridinol. A bifunctional hapten was designed and synthesized by conjugating com. available N.epsilon.-2,4-dinitrophenyl (DNP)-L-lysine to triclopyr, and then coupling this to carrier proteins such as bovine serum albumin (BSA). The synthesized bifunctional hapten greatly raised the antiserum titer in comparison with that of the conventional hapten, triclopyr. Antiserum with a sufficiently high titer to provide the detns. of targeted compds. was obtained only 63 days after the primary immunization. The obtained antiserum showed the highest affinity to triclopyr (IC<sub>50</sub> = 3.5 nM) and 3,5,6-trichloro-2-pyridinol (IC<sub>50</sub> = 5.1 nM) in homologous ELISA. The cross-reactivities to various agrochems. and some chlorinated phenolic compds. were detd. Significant cross-reactivity was found to the herbicide 2,4,5-T. The antiserum reacted to both triclopyr and its metabolite. Assay sensitivity was evaluated for effects of various assay conditions, including pH value and concns. of org. solvents and detergents. Under optimized assay conditions, the quant. working range of triclopyr ELISA was from 0.1 to 5.2 ng/mL with a limit of detection (LOD) of 0.037 ng/mL, and an IC<sub>50</sub> of 0.72 ng/mL. On the other hand, the quant. working range of 3,5,6-trichloro-2-pyridinol ELISA was from 0.13 to 6.0 ng/mL with a LOD of 0.052 ng/mL, and an IC<sub>50</sub> of 0.95 ng/mL. Water samples fortified with triclopyr or its metabolite at 1, 5, and 10 ng/mL were directly analyzed without extn. and cleanup by the proposed ELISA. The mean recovery was 101.6%, and the mean coeff. of variation (CV) was 7.1% in the case of the triclopyr ELISA. In the case of the 3,5,6-trichloro-2-pyridinol ELISA, the mean recovery was 99.8%, and the mean CV was 9.5%. The proposed ELISA turned out to be a powerful tool for monitoring of residual triclopyr or 3,5,6-trichloro-2-pyridinol in water samples at trace level.

CC 5-1 (Agrochemical Bioregulators)

Section cross-reference(s): 61

IT **Immunoassay**

(enzyme-linked immunosorbent assay; for triclopyr and 3,5,6-trichloro-2-pyridinol using polyclonal antiserum prepd. with bifunctional hapten)

IT 67-56-1, Methanol, reactions 121-44-8, Triethylamine, reactions

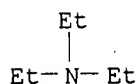


538-75-0, N,N'-Dicyclohexylcarbodiimide 1094-76-4,  
 (DNP)-L-lysine 2592-95-2, 1-Hydroxy-1H-benzotriazole 14455-27-7,  
 L-Lysine, N6-(2,4-dinitrophenyl)-, hydrochloride  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of bifunctional hapten for immunochem. detns. of triclopyr and  
 3,5,6-trichloro-2-pyridinol)

IT 121-44-8, Triethylamine, reactions 538-75-0,  
 N,N'-Dicyclohexylcarbodiimide  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of bifunctional hapten for immunochem. detns. of triclopyr and  
 3,5,6-trichloro-2-pyridinol)

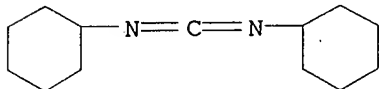
RN 121-44-8 HCAPLUS

CN Ethanamine, N,N-diethyl- (9CI) (CA INDEX NAME)



RN 538-75-0 HCAPLUS

CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:197670 HCAPLUS

DOCUMENT NUMBER: 128:254896

TITLE: Multi-array, multi-specific electrochemiluminescent  
 testing

INVENTOR(S): Wohlstadter, Jacob N.; Wilbur, James; Sigal, George;  
 Martin, Mark; Guo, Liang-Hong; Fischer, Alan; Leland,  
 Jon; Billadeau, Mark A.; Helms, Larry R.; Darvari,  
 Ramin

PATENT ASSIGNEE(S): Meso Scale Technologies, LLC, USA

SOURCE: PCT Int. Appl., 288 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9812539	A1	19980326	WO 1997-US16942	19970917
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,				
DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR,				
KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ,				
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG,				
UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,  
GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,  
GN, ML, MR, NE, SN, TD, TG

US 6207369 B1 20010327 US 1996-715163 19960917  
AU 9746495 A1 19980414 AU 1997-46495 19970917  
AU 743567 B2 20020131  
EP 944820 A1 19990929 EP 1997-945249 19970917

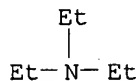
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI

JP 2001503856 T2 20010321 JP 1998-514984 19970917

PRIORITY APPLN. INFO.:

US 1996-715163 A 19960917  
US 1995-402076 B2 19950310  
US 1995-402277 B2 19950310  
US 1996-611804 A2 19960306  
WO 1997-US16942 W 19970917

- AB Materials and methods are provided for producing patterned multi-array, multi-sp. surfaces for use in diagnostics. The invention provides for electrochemiluminescence methods for detecting or measuring an analyte of interest. It also provides for novel electrodes for ECL assays. Materials and methods are provided for the chem. and/or phys. control of conducting domains and reagent deposition for use multiply specific testing procedures.
- IC ICM G01N021-00  
ICS G01N033-53; G01N033-533; G01N033-543; C12M001-00; C12Q001-00
- CC 9-1 (Biochemical Methods)  
Section cross-reference(s): 73
- IT **Immunoassay**  
(chemiluminescence, electro-; multiple electrochemiluminescent sandwich immunoassay on polyacrylamide surface supported on electrode)
- IT **121-44-8**, processes 814-68-6, Acryloyl chloride 130727-41-2, (1-Mercapto-11-undecyl)tri(ethylene glycol)  
RL: PEP (Physical, engineering or chemical process); PROC (Process)  
(fabrication of multiple electrochemiluminescent sandwich immunoassay on polyacrylamide surface supported on electrode)
- IT 108-30-5, reactions **1892-57-5**, Ethyl-3-diaminopropylcarbodiimide 6066-82-6, N-Hydroxysuccinimide 13822-56-5, 3-Aminopropyltrimethoxysilane  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of aerosil 200 silica particles coated with streptavidin in electrochemiluminescent assays)
- IT **121-44-8**, processes  
RL: PEP (Physical, engineering or chemical process); PROC (Process)  
(fabrication of multiple electrochemiluminescent sandwich immunoassay on polyacrylamide surface supported on electrode)
- RN 121-44-8 HCAPLUS
- CN Ethanamine, N,N-diethyl- (9CI) (CA INDEX NAME)



- IT **1892-57-5**, Ethyl-3-diaminopropylcarbodiimide  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of aerosil 200 silica particles coated with streptavidin in electrochemiluminescent assays)

RN 1892-57-5 HCAPLUS  
 CN 1,3-Propanediamine, N'-(ethylcarbonimidoyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)

Et-N=C=N-(CH<sub>2</sub>)<sub>3</sub>-NMe<sub>2</sub>

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:761899 HCAPLUS

DOCUMENT NUMBER: 128:45575

TITLE: Preparation of fluorescent group-containing **carbodiimide** compounds for nucleic acid detection

INVENTOR(S): Suzuki, Osamu; Masuda, Gen; Shiohata, Namiko; Matsumoto, Kazuko

PATENT ASSIGNEE(S): Nisshinbo Industries, Inc., Japan; Nisshin Spinning

SOURCE: Eur. Pat. Appl., 50 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 808829	A1	19971126	EP 1997-303430	19970520
EP 808829	B1	20030409		
R: DE, FR, GB				
JP 10287870	A2	19981027	JP 1997-122638	19970513
US 5856479	A	19990105	US 1997-857536	19970516
PRIORITY APPLN. INFO.:			JP 1996-124793	A 19960520
			JP 1996-296887	A 19961108
			JP 1997-32459	A 19970217

OTHER SOURCE(S): MARPAT 128:45575

AB Fluorescent group-contg. **carbodiimides** are prepd. for use in the detection of nucleic acids by immuno- or chemiluminescence assays. Thus, 1-aminopyrene and 3-(dimethylamino)propyl isothiocyanate to give a thiourea followed by conversion to the title **carbodiimide**. The above compd. was used for the detection of hybrid nucleic acid.

IC ICM C07C267-00  
 ICS C07H021-00; C12Q001-68; G01N033-53

CC 9-5 (Biochemical Methods)  
 Section cross-reference(s): 3, 41

ST nucleic acid detection fluorescent **carbodiimide** prepn; DNA hybridization fluorescent **carbodiimide** prepn

IT Nucleic acid hybridization  
 RL: ANT (Analyte); ANST (Analytical study)  
 (DNA-DNA; prepn. of fluorescent group-contg. **carbodiimide** compds. for nucleic acid detection)

IT Fluorescent indicators  
 Fluorometry  
 Immunoassay  
 Luminescence, chemiluminescence

(prepn. of fluorescent group-contg. **carbodiimide** compds. for nucleic acid detection)

IT DNA  
Immobilization, biochemical  
Nucleic acid hybridization  
RL: ANT (Analyte); ANST (Analytical study)  
(prepn. of fluorescent group-contg. **carbodiimide** compds. for nucleic acid detection)

IT Antibodies  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(prepn. of fluorescent group-contg. **carbodiimide** compds. for nucleic acid detection)

IT Antigens  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(prepn. of fluorescent group-contg. **carbodiimide** compds. for nucleic acid detection)

IT 199933-38-5P 199933-40-9P 199933-42-1P 199933-43-2P 199933-44-3P  
199933-45-4P 199933-46-5P 199933-47-6P 199933-48-7P 199933-49-8P  
199933-50-1P  
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)  
(prepn. of fluorescent group-contg. **carbodiimide** compds. for nucleic acid detection)

IT 60-32-2, 6-Aminocaproic acid 66-71-7, 1,10-Phenanthroline 80-48-8  
109-55-7 120-75-2, 2-Methylbenzothiazole 123-00-2,  
4-Morpholinepropanamine 326-91-0 491-35-0, 4-Methylquinoline  
605-65-2 611-35-8, 4-Chloroquinoline 627-31-6, 1,3-Diiodopropane  
1606-67-3, 1-Pyrenamine 1892-57-5 2382-96-9,  
2-Benzoxazolethiol 4048-33-3, 6-Amino-1-hexanol 27421-70-1  
35231-44-8 82911-69-1 146616-66-2 163921-37-7  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of fluorescent group-contg. **carbodiimide** compds. for nucleic acid detection)

IT 2654-52-6P 4199-88-6P 13673-62-6P 18884-15-6P 54258-41-2P,  
1,10-Phenanthroline-5-amine 58992-59-9P 67013-48-3P 88574-06-5P  
110232-19-4P 126139-93-3P 145387-51-5P 161057-97-2P 169454-25-5P  
174417-52-8P 174417-53-9P 199933-51-2P 199933-52-3P 199933-53-4P  
199933-54-5P 199933-57-8P 199933-58-9P 199933-59-0P 199933-60-3P  
199933-61-4P 199933-62-5P 199933-63-6P 199933-64-7P 199933-65-8P  
199933-66-9P 199933-67-0P 199933-70-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. of fluorescent group-contg. **carbodiimide** compds. for nucleic acid detection)

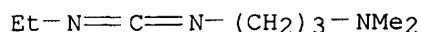
IT 109-55-7 1892-57-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of fluorescent group-contg. **carbodiimide** compds. for nucleic acid detection)

RN 109-55-7 HCAPLUS  
CN 1,3-Propanediamine, N,N-dimethyl- (6CI, 8CI, 9CI) (CA INDEX NAME)

H<sub>2</sub>N-(CH<sub>2</sub>)<sub>3</sub>-NMe<sub>2</sub>

RN 1892-57-5 HCAPLUS  
CN 1,3-Propanediamine, N'-(ethylcarbonimidoyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)

NAME)



L30 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:42008 HCAPLUS  
 DOCUMENT NUMBER: 126:57123  
 TITLE: Method for analyzing biological active substances  
 INVENTOR(S): Suzuki, Osamu; Sasaki, Naokazu; Ichihara, Tatsuo;  
 Okada, Sanae  
 PATENT ASSIGNEE(S): Nisshinbo Industries, Inc., Japan  
 SOURCE: Eur. Pat. Appl., 22 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 747703	A2	19961211	EP 1996-304158	19960605
EP 747703	A3	19980909		
EP 747703	B1	20021023		
R: DE, FR, GB				
JP 08334509	A2	19961217	JP 1995-143715	19950609
US 5908746	A	19990601	US 1996-660295	19960607
PRIORITY APPLN. INFO.:			JP 1995-143715	A 19950609

AB A method is provided, comprising the steps of reacting a biol. active first substance immobilized on a carrier with a second substance capable of specifically binding the first substance, and detecting a non-bound part of the second substance or a bound part of the second substance indirectly bound to the carrier through binding between the first and second substances so that the first substance or the second substance in a sample is analyzed, wherein the carrier carries a compd. having 2-100 **carbodiimide** groups, and the first substance is immobilized on the carrier through the **carbodiimide** groups so that the active substance such as protein and nucleic acid is bound to the carrier conveniently, efficiently, and tightly.

IC ICM G01N033-543  
 ICS G01N033-547; G01N033-58; C12Q001-68

CC 9-16 (Biochemical Methods)  
 Section cross-reference(s): 3, 15

ST bioactive compd detection immobilization **carbodiimide** compd;  
 biopolymer detection **carbodiimide** compd

IT Immunoglobulins  
 RL: ANT (Analyte); ANST (Analytical study)  
 (G; biol. active substances detection by carrier immobilization and using **carbodiimide** compds.)

IT Immunoassay  
 (agglutination test; biol. active substances  
 detection by carrier immobilization and using **carbodiimide**  
 compds.)

IT Biochemical molecules  
 Immobilization, biochemical

Microtiter plates  
Nucleic acid hybridization  
    (biol. active substances detection by carrier immobilization and using  
    **carbodiimide** compds.)

IT Antibodies  
Antigens  
Biopolymers  
DNA  
Nucleic acids  
Peptides, analysis  
Proteins, general, analysis  
RL: ANT (Analyte); ANST (Analytical study)  
    (biol. active substances detection by carrier immobilization and using  
    **carbodiimide** compds.)

IT Avidins  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
    (biol. active substances detection by carrier immobilization and using  
    **carbodiimide** compds.)

IT Chemiluminescent substances  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
    (biol. active substances detection by carrier immobilization and using  
    **carbodiimide** compds.)

IT Dyes  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
    (biol. active substances detection by carrier immobilization and using  
    **carbodiimide** compds.)

IT Enzymes, uses  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
    (biol. active substances detection by carrier immobilization and using  
    **carbodiimide** compds.)

IT Fluorescent probes  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
    (biol. active substances detection by carrier immobilization and using  
    **carbodiimide** compds.)

IT Radionuclides, uses  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
    (biol. active substances detection by carrier immobilization and using  
    **carbodiimide** compds.)

IT Latex  
RL: ARU (Analytical role, unclassified); ANST (Analytical study)  
    (biol. active substances detection by carrier immobilization and using  
    **carbodiimide** compds.)

IT Immunoassay  
    (enzyme-linked immunosorbent assay, sandwich; biol. active substances  
    detection by carrier immobilization and using **carbodiimide**  
    compds.)

IT Polyoxyalkylenes, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
    (reaction products with 4,4-diphenylmethane diisocyanate; biol. active  
    substances detection by carrier immobilization and using  
    **carbodiimide** compds.)

IT Interferons  
RL: ANT (Analyte); ANST (Analytical study)  
    (.gamma.; biol. active substances detection by carrier immobilization  
    and using **carbodiimide** compds.)

IT 9003-53-6, Polystyrene  
RL: ARU (Analytical role, unclassified); ANST (Analytical study)

- (beads; biol. active substances detection by carrier immobilization and using **carbodiimide** compds.)
- IT 9001-91-6, Plasminogen 9002-60-2, ACTH, analysis  
RL: ANT (Analyte); ANST (Analytical study)  
(biol. active substances detection by carrier immobilization and using **carbodiimide** compds.)
- IT 58-85-5, Biotin **151-51-9, Carbodiimide** 1672-46-4,  
Digoxigenin 9013-20-1, Streptavidin 185159-87-9 185159-88-0  
185159-89-1 185159-90-4 185159-91-5 185159-92-6  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(biol. active substances detection by carrier immobilization and using **carbodiimide** compds.)
- IT 9017-01-0DP, TDI homopolymer, reaction products with Ph isocyanate  
25686-28-6DP, 4,4'-Diphenylmethane diisocyanate polymer, reaction products  
with Ph isocyanate or with polyethylene glycol 53880-05-0DP, Isophorone  
diisocyanate homopolymer, reaction products with Bu isocyanate  
62948-28-1DP, 4,4'-Dicyclohexylmethane diisocyanate homopolymer, reaction  
products with cyclohexyl isocyanate  
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST  
(Analytical study); PREP (Preparation); USES (Uses)  
(biol. active substances detection by carrier immobilization and using **carbodiimide** compds.)
- IT 80-48-8D, Methyl p-toluenesulfonate, reaction products with isocyanate  
terminated-isophorone diisocyanate homopolymer and 3-  
dimethylaminopropylamine 103-71-9D, Phenyl isocyanate, reaction products  
with TDI homopolymer **109-55-7D**, 3-Dimethylaminopropylamine,  
reaction products with isocyanate terminated-isophorone diisocyanate  
homopolymer 110-60-1D, 1,4-Diaminobutane, reaction products with  
4,4-dicyclohexylmethane diisocyanate 111-36-4D, n-Butyl isocyanate,  
reaction products with poly(isophorone diisocyanate) 3173-53-3D,  
Cyclohexyl isocyanate, reaction products with poly(4,4'-  
dicyclohexylmethane diisocyanate 9004-74-4D, reaction products with  
isocyanate-terminated poly(m-Tetramethylxylylene diisocyanate) or  
poly(4,4'-dicyclohexylmethane diisocyanate) 25322-68-3D, reaction  
products with 4,4-diphenylmethane diisocyanate 111460-07-2D, Sodium  
hydroxypropanesulfonate, reaction products with isocyanate-terminated  
tolylene **carbodiimide**  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(biol. active substances detection by carrier immobilization and using **carbodiimide** compds.)
- IT 53880-05-0DP, Isophorone diisocyanate homopolymer, isocyanate terminated  
157299-02-0DP, m-Tetramethylxylylene diisocyanate homopolymer, isocyanate  
terminated  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(biol. active substances detection by carrier immobilization and using **carbodiimide** compds.)
- IT 9004-34-6, Cellulose, analysis  
RL: ARU (Analytical role, unclassified); ANST (Analytical study)  
(filter membrane; biol. active substances detection by carrier  
immobilization and using **carbodiimide** compds.)
- IT **151-51-9, Carbodiimide**  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(biol. active substances detection by carrier immobilization and using **carbodiimide** compds.)
- RN 151-51-9 HCAPLUS  
CN Methanediimine (9CI) (CA INDEX NAME)

$$\text{HN}=\text{C}=\text{NH}$$

IT 109-55-7D, 3-Dimethylaminopropylamine, reaction products with  
isocyanate terminated-isophorone diisocyanate homopolymer  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(biol. active substances detection by carrier immobilization and using  
carbodiimide compds.)  
RN 109-55-7 HCAPLUS  
CN 1,3-Propanediamine, N,N-dimethyl- (6CI, 8CI, 9CI) (CA INDEX NAME)

$$\text{H}_2\text{N}-(\text{CH}_2)_3-\text{NMe}_2$$

L30 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1987:530527 HCAPLUS  
DOCUMENT NUMBER: 107:130527  
TITLE: Fluorescent compounds and biological diagnostic  
devices  
INVENTOR(S): Arnost, Michael J.; Inbar, Shai; Meneghini, Frank A.;  
Palumbo, Paul S.; Stroud, Stephen G.; Zepp, Charles M.  
PATENT ASSIGNEE(S): Polaroid Corp., USA  
SOURCE: PCT Int. Appl., 59 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

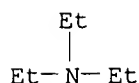
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8606374	A1	19861106	WO 1986-US912	19860423
W: AU, JP				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
US 4886744	A	19891212	US 1986-850123	19860410
AU 8658105	A1	19861118	AU 1986-58105	19860423
AU 591673	B2	19891214		
EP 220284	A1	19870506	EP 1986-903061	19860423
EP 220284	B1	19900131		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 62502548	T2	19871001	JP 1986-502508	19860423
AT 50065	E	19900215	AT 1986-903061	19860423
PRIORITY APPLN. INFO.:			US 1985-727126	19850425
			US 1986-850123	19860410
			EP 1986-903061	19860423
			WO 1986-US912	19860423

GI For diagram(s), see printed CA Issue.  
AB A fluorescent conjugate, having a large Stokes shift and useful in biol.  
diagnostic assays, comprises a biol. active moiety attached to a dye  
moiety I [R = alkyl, hydrophilic group-contg. substituent; R1 = H; R and  
R1 = C6 carbocyclic; R2, R3 = CN, COR7, COOR8, electron-withdrawing  
substituent substituted Ph; R2 and R3 = II; X = nonmetallic atoms in a 5-  
or 6-member carbocyclic or heterocyclic moiety; R4, R5 = alkyl,

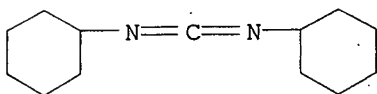


hydrophilic group-contg. substituent; R5 and R6 = (CH<sub>2</sub>)<sub>2</sub>; R6 = H; R7 = alkyl, aryl; R8 = alkyl, aryl, hydrophilic group-contg. substituent; R9, R10 = H, alkyl, hydrophilic group-contg. substituent] by a substantially achromophoric divalent linking moiety (LINK) e.g. N-hydroxysuccinimide esters, aldehydes. A labeled biol. conjugate comprises III or IV (R10 = alkyl; A = LINK; Z = biol. active moiety). V, prepd. from N-phenylpyrrolidone, 4-dicyanomethylene-2,5-dimethyl-4-H-pyran (a highly fluorescent merocyanine dye), and N-hydroxysuccinimide in 6 steps, was reacted with rabbit serum Fab anti-human serum albumin in a 0.1 M HEPES buffer at pH 8.0 and room temp. for 20 min; the reaction was then stopped by addn. of glycine. The conjugate compn. (spectroscopically detd.) was 3:1 V/Fab.

- IC ICM C07D309-34  
ICS C07D311-58; G01N001-30; G01N033-533  
CC 9-14 (Biochemical Methods)  
Section cross-reference(s): 27, 41, 73, 80  
IT **Immunochemical analysis**  
(fluorescence immunoassay, biol. conjugates with fluorescent dyes for)  
IT 50-69-1 85-44-9 100-61-8, N-Methylaniline, reactions 108-24-7, Acetic anhydride 108-31-6, Maleic anhydride, reactions 121-44-8, reactions 538-75-0, Dicyclohexylcarbodiimide 603-76-9, 1-Methylindole 999-97-3, 1,1,1,3,3,3-Hexamethyldisilazane 1004-36-0, 2,6-Dimethyl- $\gamma$ -pyrone 1606-75-3 4341-85-9, Malonitrile 4641-57-0 5292-43-3 5438-71-1, Theophylline-8-butyric acid 6066-82-6, N-Hydroxysuccinimide 7087-68-5, Diisopropylethylamine 23730-69-0 28286-88-6 57951-36-7, Dimethylaminopyridine 110259-58-0 110325-10-5 110325-11-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, in prepn. of fluorescent conjugates for biochem. assays)  
IT 121-44-8, reactions 538-75-0, Dicyclohexylcarbodiimide  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, in prepn. of fluorescent conjugates for biochem. assays)  
RN 121-44-8 HCAPLUS  
CN Ethanamine, N,N-diethyl- (9CI) (CA INDEX NAME)



- RN 538-75-0 HCAPLUS  
CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



- L30 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1984:451309 HCAPLUS  
DOCUMENT NUMBER: 101:51309  
TITLE: Unsymmetrical fluorescein derivatives  
INVENTOR(S): Khanna, Pyare; Colvin, Warren

PATENT ASSIGNEE(S): Syva Co., USA  
 SOURCE: U.S., 14 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4439356	A	19840327	US 1981-240031	19810303
US 4652531	A	19870324	US 1984-587085	19840307

PRIORITY APPLN. INFO.: US 1981-240031 19810303

AB Unsym. fluorescein derivs. were prep'd., particularly 1,8-unsubstituted-9-substituted-6-hydroxy-3H-xanthen-3-ones, having 1 aliph. substituent at any of the remaining positions, where the aliph. substituent is sepd. from the annular C atom by 0-1 O atom. These fluorescent compds. have absorption max. in 0.5M phosphate buffer pH 8 usually at least .apprx.500 nm, and they can be used to reduce background fluorescence interference occurred in chem. anal. They are potentially useful for detection or detn. of proteins, polysaccharides, nucleic acids, drugs, metabolites and others by competitive protein binding assays, e.g., immunoassay.

IC A61K039-385; A61K039-44; C07G007-00

NCL 260112000R

CC 9-10 (Biochemical Methods)  
 Section cross-reference(s): 1, 2, 7, 15

IT **Immunochemical analysis**  
 Pharmaceutical analysis  
 (unsym. fluorescein derivs. prepn. for)

IT **121-44-8, reactions**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with butylglycinate)

IT 91000-90-7 91000-91-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with dicyclohexyl **carbodiimide** and hydroxy succinimide)

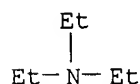
IT 6066-82-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with methoxypentachlorodicarboxyhydroxyanthrone and dicyclohexyl **carbodiimide**)

IT **538-75-0**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with methoxypentachlorodicarboxyhydroxyxanthone and hydroxysuccinimide)

IT **121-44-8, reactions**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with butylglycinate)

RN 121-44-8 HCAPLUS

CN Ethanamine, N,N-diethyl- (9CI) (CA INDEX NAME)



IT 538-75-0

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with methoxypentachlorodicarboxyhydroxyxanthenone and  
hydroxysuccinimide)

RN 538-75-0 HCAPLUS

CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)

